

**CLAIMS**

What is claimed is:

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1. A method of monitoring data in a monitoring system, comprising:

obtaining a set of one or more events;

10 configuring the monitoring system for modifying data to identify one or more of the

set of events; and

monitoring the modified data to detect one or more of the set of events.

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2. The method as recited in claim 1, further comprising:

generating a message when one or more of the set of events is detected.

15 3. The method as recited in claim 1, wherein the set of events is selectable.

4. The method as recited in claim 1, wherein each of the set of events is defined by one or  
more event attributes, the method further comprising:

20 determining whether one or more conditions are satisfied with respect to one or more  
of the event attributes associated with the set of events; and

when it is determined that one or more conditions are satisfied with respect to one or  
more of the event attributes associated with the set of events, sending a message indicating  
satisfaction of the one or more conditions with respect to one or more of the set of events

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5. The method as recited in claim 1, further comprising:

flagging the data to identify a plurality of events, wherein monitoring the modified data comprises monitoring the flagged data to detect one or more of the set of events from among the plurality of events.

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6. A method of monitoring data, comprising:

monitoring data indicating one or more events associated therewith; detecting one or more of a specified set of one or more events within the data; and sending a message indicating that one or more of the specified set of events has been detected.

7. A computer-readable medium storing thereon instructions for monitoring data, comprising:

instructions for monitoring a set of flagged data for a specified set of events, the set of flagged data indicating one or more events associated therewith;

instructions for determining when one or more conditions are satisfied with respect to one or more of the specified set of events; and

instructions for sending a message indicating satisfaction of the one or more

conditions with respect to one or more of the specified set of events when it is determined that one or more conditions are satisfied with respect to one or more of the specified set of events

8. The computer-readable medium as recited in claim 7, wherein the computer readable

medium is selected from the group consisting of CD-ROM, floppy disk, tape, flash memory, system memory, hard drive, and data signal embodied in a carrier wave.

5 9. An apparatus for monitoring data, comprising:

a processor; and

a memory, at least one of the processor and the memory being adapted for:

10 monitoring a set of flagged data for a specified set of events, the set of flagged data indicating one or more events associated therewith;

determining when one or more conditions are satisfied with respect to one or more of the specified set of events; and

15 when it is determined that one or more conditions are satisfied with respect to one or more of the specified set of events, sending a message indicating satisfaction of the one or more conditions with respect to one or more of the specified set of events.

15 10. An apparatus for monitoring data, comprising:

means for monitoring a set of flagged data for a specified set of events, the set of flagged data indicating one or more events associated therewith;

20 means for determining when one or more conditions are satisfied with respect to one or more of the specified set of events; and

means for sending a message indicating satisfaction of the one or more conditions with respect to one or more of the specified set of events when it is determined that one or more conditions are satisfied with respect to one or more of the specified set of events.

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11. A method of monitoring data, comprising:

monitoring a set of flagged data for a specified set of events, the set of flagged data indicating one or more events associated therewith;

5 determining when one or more conditions are satisfied with respect to one or more of the specified set of events; and

when it is determined that one or more conditions are satisfied with respect to one or more of the specified set of events, sending a message indicating satisfaction of the one or more conditions with respect to one or more of the specified set of events.

10 12. The method as recited in claim 11, wherein the one or more conditions and the specified set of events are configurable.

15 13. The method as recited in claim 11, wherein the message identifies one or more of the specified set of events.

14. The method as recited in claim 11, wherein the set of flagged data further indicates one or more values associated with the events that are to be monitored.

20 15. The method as recited in claim 11, wherein the set of flagged data indicates one or more events associated therewith, each of the events being defined by one or more attributes, and wherein monitoring the set of flagged data further comprises:

monitoring the set of flagged data for a specified set of one or more attributes.

16. The method as recited in claim 15, wherein determining when one or more conditions are

satisfied further comprises determining whether the one or more conditions are satisfied with respect to one or more of the specified set of attributes.

5 17. The method as recited in claim 15, further comprising:

receiving the set of one or more attributes for which one or more values are to be monitored.

10 18. The method as recited in claim 15, wherein each of the events has one or more metrics associated therewith, each of the metrics having a value to be monitored and wherein monitoring the set of flagged data further comprises:

monitoring the set of flagged data for a specified set of one or more metrics.

15 19. The method as recited in claim 18, wherein determining when one or more conditions are satisfied further comprises determining whether the one or more conditions are satisfied with respect to one or more of the specified set of metrics.

20 20. The method as recited in claim 18, further comprising:

receiving the set of one or more metrics for which one or more values are to be monitored.

21. The method as recited in claim 11, further comprising:

monitoring the set of flagged data for a set of data associated with the specified set of events.

5 22. The method as recited in claim 11, further comprising:

obtaining a set of one or more conditions for which satisfaction is to be detected; and  
storing the set of one or more conditions, wherein the set of one or more conditions  
includes the one or more conditions.

10 23. The method as recited in claim 22, wherein each of the set of conditions has an associated  
condition type.

15 24. The method as recited in claim 22, wherein the one or more conditions are defined such  
that the one or more conditions are associated with the specified set of events.

20 25. The method as recited in claim 11, further comprising:

retrieving a set of one or more stored conditions for which satisfaction is to be  
detected, the set of one or more stored conditions including the one or more conditions.

26. The method as recited in claim 11, wherein monitoring a set of flagged data for a  
specified set of events comprises:

publishing a subscription request on a message bus to subscribe to the specified set of  
events; and

obtaining at least a portion of the set of flagged data that is associated with the specified set of events.

27. The method as recited in claim 26, wherein the set of flagged data is transmitted on the  
5 message bus by an adapter configured to flag data to identify one or more events.

28. The method as recited in claim 11, wherein the one or more events are associated with a first entity and the specified set of events is associated with a second entity.

10 29. The method as recited in claim 11, wherein the one or more events and the specified set of events are events of interest to one or more entities associated with a business enterprise.

15 30. A method of monitoring data, comprising:

sending a request for flagged data associated with a specified set of events from a set of flagged data indicating one or more events associated therewith;

receiving a subset of the set of flagged data that is associated with the specified set of events;

20 determining from the subset of the set of flagged data that is associated with the specified set of events when one or more conditions are satisfied with respect to one or more of the specified set of events; and

when it is determined that one or more conditions are satisfied with respect to one or more of the specified set of events, sending a message indicating satisfaction of the one or more conditions with respect to one or more of the specified set of events.

31. The method as recited in claim 30, further comprising:

filtering the subset of the set of flagged data according to one or more business attributes.

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32. The method as recited in claim 30, further comprising:

filtering the subset of the set of flagged data to obtain one or more data values associated with one or more business metrics.

33. The method as recited in claim 30, wherein the one or more events and the specified set of events are events of interest to one or more entities associated with a business enterprise.

34. The method as recited in claim 30, wherein each of the conditions has an associated condition type.

35. The method as recited in claim 30, wherein the one or more conditions are defined such that the one or more conditions are associated with the specified set of events.

36. A method of monitoring data, comprising:

- sending a request for flagged data associated with a specified set of events;
- receiving flagged data associated with the specified set of events;
- determining from the flagged data associated with the specified set of events whether one or more conditions are satisfied; and
- when it is determined that one or more conditions are satisfied with respect to one or

more of the specified set of events, sending a message indicating satisfaction of the one or more conditions with respect to one or more of the specified set of events.

37. The method as recited in claim 36, wherein the one or more conditions are defined such  
5 that the one or more conditions are associated with the specified set of events.

38. The method as recited in claim 36, wherein the one or more conditions are defined  
independent from the specified set of events.

10 39. The method as recited in claim 36, wherein the one or more conditions are defined such  
that each of the one or more conditions are associated with one or more of the specified set of  
events.

15 40. The method as recited in claim 36, wherein the one or more conditions are defined such  
that at least one of the conditions is associated with one or more of a plurality of event  
attributes that define one or more of the specified set of events.

41. The method as recited in claim 11, further comprising:

20 receiving a condition type selection; and

defining one of the conditions such that the condition type is associated with one or  
more of the specified set of events.

42. The method as recited in claim 41, wherein defining one of the conditions further

comprises:

receiving a selection of one or more event attributes associated with one or more of the specified set of events such that the condition is associated with the selected event attributes.

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43. The method as recited in claim 11, wherein each of the one or more conditions has an associated condition type, the condition type being one of a plurality of condition types.

44. The method as recited in claim 43, wherein the plurality of condition types includes single occurrence condition type indicating that one of the specified set of events is to occur a single time and multiple occurrence condition type indicating that one of the specified set of events is to occur a specified number of times.

45. The method as recited in claim 44, wherein the multiple occurrence condition type further indicates that one of the specified set of events is to occur the specified number of times within a specified period of time.

46. The method as recited in claim 43, wherein one of the condition types is event attribute comparison indicating one or more event attributes for which one or more values are to be compared.

47. The method as recited in claim 46, wherein two or more values are to be compared using the condition.

48. The method as recited in claim 43, wherein one of the condition types is a boolean expression including one or more event attributes.

5 49. The method as recited in claim 43, wherein one of the condition types is a follow-by paired event indicating a first one of the specified set of events to be followed by a non- occurrence of a second one of the specified set of events.

10 50. The method as recited in claim 43, wherein one of the condition types is a follow-by paired event indicating a first one of the specified set of events to be followed by a second one of the specified set of events.

15 51. The method as recited in claim 50, wherein the follow-by paired event further indicates that the first one of the specified set of events is to be followed by the second one of the specified set of events within a specified period of time.

20 52. The method as recited in claim 50, wherein the first one of the specified set of events and the second one of the specified set of events must occur or be detected within a specified period of time.

53. The method as recited in claim 43, wherein one of the condition types is a time-based pair indicating a first one of the specified set of events to be detected within a specified period of time within a second one of the specified set of events.

54. The method as recited in claim 43, wherein one of the condition types is cancel-by paired event indicating a first one of the specified set of events to be cancelled upon detection of a second one of the specified set of events.

5 55. The method as recited in claim 54, wherein the first one of the specified set of events is to be cancelled when the second one of the specified set of events occurs within a specified period of time of the first one of the specified set of events.

10 56. The method as recited in claim 54, wherein the first one of the specified set of events is to be cancelled upon detection of the second one of the specified set of events within a specified period of time of the first one of the specified set of events.

15 57. The method as recited in claim 43, wherein one of the condition types is overdue indicating that an event is overdue when the associated condition is satisfied.

58. The method as recited in claim 43, wherein one of the condition types is impending indicating that an event is impending when the associated condition is satisfied.

20 59. The method as recited in claim 11, wherein each of the specified set of events are defined by one or more entities associated with a business enterprise.

60. The method as recited in claim 11, wherein each of the conditions are defined such that  
each of the conditions are associated with one or more of the specified set of events.

61. A method of configuring a monitoring system for monitoring data in accordance with one  
5 or more conditions, comprising:

receiving a selection of a condition for which satisfaction is to be detected;

receiving a selection of one or more events for which the condition is to be satisfied;

and

10 associating the selected condition with the one or more selected events, thereby  
enabling satisfaction of the selected condition with respect to the one or more selected events  
to be detected during monitoring of data identifying a plurality of events.

62. The method as recited in claim 61, further comprising:

receiving a selection of one or more event attributes from a plurality of event

15 attributes that define one or more of the events for which the condition is to be satisfied; and

associating the selected condition with the selected event attributes.

63. The method as recited in claim 61, wherein the condition is a single occurrence condition  
indicating that one of the events is to occur a single time for the condition to be satisfied.

20 64. The method as recited in claim 61, wherein the condition is a multiple occurrence  
condition indicating that one of the events is to occur a specified number of times for the  
condition to be satisfied.

65. The method as recited in claim 64, wherein the multiple occurrence condition further indicates that one of the events is to occur the specified number of times within a specified period of time.

5 66. The method as recited in claim 61, wherein the condition is an event attribute comparison condition indicating one or more event attributes for which one or more values are to be compared.

10 67. The method as recited in claim 66, wherein two or more values are to be compared using the condition.

15 68. The method as recited in claim 61, wherein the condition is a time-based pair indicating a first one of the events to be detected within a specified period of time within a second one of the events.

20 69. The method as recited in claim 61, wherein the condition is a follow-by paired event indicating a first one of the events to be followed by a non-occurrence of a second one of the events.

70. The method as recited in claim 61, wherein the condition is a follow-by paired event condition indicating a first one of the events to be followed by a second one of the events.

71. The method as recited in claim 70, wherein the follow-by paired event further indicates

that the first one of the events is to be followed by the second one of the events within a specified period of time.

72. The method as recited in claim 61, wherein the condition is a cancel-by paired event condition indicating a first one of the events to be canceled upon detection of a second one of the events.

73. The method as recited in claim 72, wherein the first event is to be canceled upon detection of the second one of the events within a specified period of time of the first one of the events.

74. The method as recited in claim 61, wherein the condition is an overdue condition indicating that the selected event is overdue when the condition is satisfied.

75. The method as recited in claim 74, wherein the condition is defined by one or more event attributes associated with the selected event to be compared via a comparison operation.

76. The method as recited in claim 61, wherein the condition is an impending condition indicating that the selected event is impending when the condition is satisfied.

77. The method as recited in claim 76, wherein the condition is defined by one or more event attributes associated with the selected event and a comparison operation via which the one or more event attributes are to be compared.